



**SPECIAL MEETING OF THE COMMON COUNCIL
MIDDLETOWN, CONNECTICUT
MARCH 14, 2013**

WORKSHOP – ENERGY INITIATIVES

Special Meeting

A special meeting of the Common Council of the City of Middletown was held in the Council Chamber on Thursday, March 14, 2013 immediately following the 7 p.m. Community Meeting.

Present

Deputy Mayor Robert Santangelo, Council Members Ronald P. Klattenberg, Mary A. Bartolotta, Grady L. Faulkner, Jr., Philip J. Pessina, Joseph E. Bibisi, and Linda Salafia; and Common Council Clerk Marie O. Norwood.

Absent

Mayor Daniel T. Drew and Council Members Thomas J. Serra, Gerald E. Daley, Hope P. Kasper, Todd G. Berch, Deborah Kleckowski, and Corporation Counsel Daniel B. Ryan,

Also Present

Four members of the public

Meeting Called to Order

The Deputy Mayor calls the meeting to order at 7:09 p.m.

Call of Meeting Read

The Call of Meeting was read and accepted. Deputy Mayor Santangelo declares the Call a Legal Call and the Meeting a Legal meeting.

The Acting Chair states for the record, we didn't say the pledge because we just said it and if there is any objection, they can say it again. Hearing no objections, he thanks the Council.

Workshop Opens

The Acting Chair calls John Hall forward. Councilman Klattenberg would like to say a few words first if there is no objection. He thanks Councilman Bibisi for asking for this workshop because it is hard to get people to ask questions or follow up on energy initiatives the City is embarking on. We have a community task force that has worked on energy projects since 2005 and you will see quite a few projects besides Honeywell that is saving the City money. With the support of Mayor Thornton for the Task Force and she signed on for Mayor's Initiative to reduce the municipal carbon footprint, that is what started this. Up to that point, whenever the budget was worked on by the Council and the line item for electricity was reviewed, use was consistently increased every year. When you ask the directors why they increased it, their response is because the power company told them to. What you will see, the City is taking electricity and energy usage and the cost of energy much more seriously since the resolution in 2005.

Mr. Hall welcomes this opportunity; he has been involved in the work about 1-1/2 years. He is learning a lot and getting benefits for the City of Middletown. He invites the members of the public to come up front and turn their chairs to face the screen to see the presentation. He has four printed copies of the presentation that he would like to get in the hands of members who are not here. You can review it and then pass it on to others who are not here. He states he can send it electronically. I am trying to recover from an injury on my foot, I will be sitting during the slideshow.

He states we will be covering the actual results of Honeywell energy conservation measures; other energy management initiatives; and end with conclusions and recommendations.

Most of the Honeywell work started in 2010 and construction ended in 2011 and some in 2012. Fiscal year 2012 was first year they had 12 months of results although some showed up in other years. One of the benefits of the Honeywell project was Honeywell included a part time energy manager in what they were providing. The Council had reservations to hire another employee and Honeywell was interested in going forward and they threw in a part time manager and when he retired, he picked it up in September 2011 and as result of doing this, he has assisted Finance and the Mayor's Office and the Clean Energy Task Force to take on other energy initiatives and the benefits have astounded everyone including me. He looks forward to a conversation with Council about this data and hopes for the future.

Mr. Hall begins his presentation showing the actual City Hall electrical usage for 5 years. It is a building we are familiar with and it received a lot of heating and venting controls and the bench mark year was fiscal year

2009 and you can see that 512,640 was accumulated on the electric meter and it has gone steadily down. Councilman Bibisib asks what Mr. Hall attributed it to. Mr. Hall replies the lighting changes and the controls Honeywell installed that, for example, instead of a pump going on or off, it runs at a variable speed. We set temps down at night and bring it up in the morning. There are power controls on the computers and that is the main reasons for decline of electric usage.

Mr. Hall asks what does 512,000 kwh mean. He translates it to dollars. He simplified it so the changes in the electricity rate are not visible. It is declining expenses due to declining use. If the rate was \$.15 kwh which it was not, but if it had been the same, this is the savings strictly from energy conservation from \$77,000 to \$57,000. That is \$20,000 just in electricity conservation in City Hall. He shows a slide for natural gas and oil. City Hall has used oil and natural gas for heating. He has taken the oil and natural gas and put it into a common unit of BTU's. We are using a lot less heating fuel, dramatically down in 2012. We have a new efficient boiler and we are not heating the building all night.

Russell Library has shown great improvement and shows from 2009 to 2012, gone from over \$76,000 to a little less than \$56,000 dollars. The natural gas usage is dramatically down to about \$18,000. They saved not quite half of the natural gas consumption strictly from Honeywell controls and variable speed drives.

The Police Station has not seen much change; it has gone down slightly and they should have seen a lot more and this building has a lot of problems and there are serious problems from the time it was built and serious issues with maintenance and it is hard to figure out what is wrong with the building.

Roth Water Treatment plant is the highest user of electricity in the City. They have gone from \$417,000 to \$311,000 dollars, over \$100,000 savings based mostly on variable speed drives. Any water treatment or pollution control facility uses a lot of electricity.

He shows the facilities in one graph and it shows the buildings that use the most. Roth Water Treatment Plant and the Water Pollution Treatment Plant are the highest. In the general fund, Police headquarters use a lot and City Hall and Russell Library are the least and Remington Rand uses a lot. He took an approximate value for the rest and the total electrical consumption has shown a decrease and it is attributable to conservation measures.

Councilman Faulkner asks about schools. Mr. Hall responds there are no schools in here.

Mr. Hall continues they had software where you enter all electrical, natural gas, square footage, type of Building, number of people working, computers and enter the data and the benchmark year 2009 to current it transfers to BTUs and measures against square footage and shows energy usage to buildings of that type and takes weather out of the equation. He points out for City Hall, for example, the base line energy intensity of 140 and it went down to 83 and the national median is 90. City Yard, they started at 161 BTUs per square foot and are down to 119 and still above national median but a good improvement. He looks at Cross Street Fire which has come down, but dispatch is there and it uses a lot of electricity. Main Street Fire Headquarters is down and Russell Library started at 81.9 and they are down to 41.2. We are just over ½ the national median. It was not built to be energy efficient and Honeywell made a lot of improvements and are doing a good job there. He shows police headquarters the national median is 82; the base line was 315 and they are down to 307. We are almost 4 times the average usage.

Councilman Klattenberg states you should comment about the police station and it clearly reflects how poorly the station was designed. In large measure, the police station when designed was not planned for a restaurant and it was designed for retail. The air conditioner runs 24 hours a day, seven days a week 365 days a year. There are more design problems; this is the tip of the iceberg. Councilman Pessina states there was no clerk of the works. The fact is we as a Council will have to decide if we want to fix the building. Mr. Hall states he did research with the lease for the First and Last Tavern that was signed; it was up for 10 year renewal in 1999 or maybe a 15 year renewal and was not signed until 2010; in 2015, the lease is up and one of the big problems it specifies the tenant will get hot and chilled water from the Police Headquarters. We pay for the chilling and heating of the water. They are running dishwashers, air fans and they are exhausting air from their space. The energy use in the restaurant is a big problem here. Councilwoman Bartolotta states the City is paying for the First and Last's hot water and cold water? Mr. Hall responds not just cold water to run the toilets, but chilled water to run their air conditioning.

Councilman Pessina states they inherited it as a police department and they have had problems; when they moved, he was a lieutenant and one of the first things they had to do was retro fit a brick oven, including the support system for the oven. It was built for retail and along the way, it was decided to put a restaurant in after the building was constructed. They had to pay for a lot of utilities associated with that. Above the inefficiency of the building, there is a problem with Honeywell that has created a whole nightmare with the police administration. Apparently Honeywell installed some of the controls without making an assessment of what was in the building and if that was done, adjustments could have been made and Deputy Chief Timbro has done the fact finding and they know where they are at and trying to find out where the problems are and Honeywell exacerbated the problems. Mr. Hall states there is more to the story than that. The City bears some responsibility. Councilman Klattenberg adds he is not convinced it was Honeywell's job to do an analysis for the building. You can assume the building was built fundamentally correct; they weren't there to find out what was wrong but deal with a relatively new building that had standard energy features they can improve on. It wasn't in the contract; it wasn't their charge.

Mr. Hall states this subject is worthy of a workshop on its own. From the design of the building and it has not been maintained and they can go on and it is a big problem. The energy bill is \$177,000 a year. Councilman Pessina states it is a combination of what happened. We know what happened to the roof. Unfortunately it will come to the Council and be in our lap. We have to move forward here. Mr. Hall states they are having ongoing meetings with Honeywell to see what is going on. Councilwoman Bartolotta asks who was in charge

of the final inspections. This was a major building and who gave the final okay for this. Councilman Pessina states the building got a national award for design.

Mr. Hall continues with his presentation and states this is not to save the City energy, but we have a climate problem and the driving force is financial and reducing greenhouse gas emissions. They have reduced it every year and it is the same as removing 346 passenger cars from the roads or all power including heating for 153 homes. It is a significant decrease in greenhouse gas emissions and we are doing something about climate change.

He moves on to unmetered streetlights. You can measure the kwh, but streetlights are not metered and the City gets charged to run the street lights and they have to maintain the street lights. We pay a lot for the maintenance of the street lights and CL & P makes a lot of money on this and we have the convenience to not worry about this. When you add all electricity use, we have gone down, but because unmetered streetlights doesn't go down, the overall effect is not dramatic. The City spends over \$2 million dollars a year.

He was surprised to learn this building requires very little heating. The bodies and computers keep it heated for the rest of the day except for the months of January, February, and March. Natural gas usage has gone down in some, more than others. Police headquarters has gone down with gas usage as has the Fire Headquarters and Russell Library, gas usage dropped dramatically. He states Councilman Serra asked this question and he asked about the effect of reducing our electrical rate. Mr. Hall states he gives Clean Energy Task Force credit for going out and looking at the market so we are doing better than if we did nothing. Our cost has gone down and we know our power costs because we already bought it and our rates will go down considerable from 2014 to 2016; they extended the rates we have for two more years. We are hopeful natural gas will still be low.

Councilman Pessina asks where are we with Greenskies. Mr. Hall responds that Greenskies decided not to put a large array at the land fill because the Remington building doesn't use much power and they are putting it on the roof and it will not be as big as they proposed. There is a Z-Req program that offers huge incentives for renewable energy; it is a reverse auction and there are three groups, and Greenskies won two awards in Middletown, one for Woodrow Wilson Middle school and a unit at the high school, but the renewable energy credits are very valuable. We are only going to buy power from them. Councilman Pessina asks if that won't reduce energy costs. Mr. Hall responds yes; but Greenskies wants a rate that will go up 3 – 4 % a year and he doubts it will go up that much per year. The solar they will get for 8.5 cents per kwh.

Mr. Hall shows the trends in total electricity costs looking at the past and in the future to 2013, the totals are actual and 2014 and 2015, that is based on constant usage and a rate going down. He shows the various departments for electricity expenditures over \$2 million and now down to \$1,667,630.

The streetlights, the City did a study to buy them in 2005 and they did some analysis and the City didn't buy them at that time and he had a chance to delve into this and more cities have bought them and there is more experience about this. He names towns who have done this and he spoke with the towns and Stamford has done a fantastic job. In fiscal year 2001 through 2003, he shows the actual costs for streetlights based on electricity and maintenance. For fiscal year 2004, they bought the street lights; it (costs) went down and they are paying only electricity and it shows a large reduction to maintain the street lights. They went in 2004 from \$1.5 mil down to \$860,000. The line goes up because electricity rates went up and if they hadn't bought the lights, the costs would have gone up anyway. Councilman Klattenberg states Stamford did redevelopment during those years and there were more lights in that period. Mr. Hall states he can look at that. In recent years 09 – 12 they put in LED lights that use 1/4 of the wattage and last at least 4 times as long and they don't replace them as often. CL & P wants to keep relamping with high wattage light that burns out more quickly than LED lights. Councilman Klattenberg states when Bob Dobmeier did the study, CL & P did a major revamping of the infrastructure and we were at the top end and they wanted to get all their money back and it has now depreciated and it might be more feasible to buy them because of the depreciation. Councilman Pessina states we mention streetlights, but the big flood lights, they must use a lot of wattage. Mr. Hall responds they do. Based on conversations with Bish Electric, we could do better in maintaining our lights than Stamford has. It requires serious conversation and 2015, CL & P will put in new lights and if we are going to act, now is the time to do it. We lose about 5 or 6 lights a week; Bish goes out on Friday replacing them. He did the math; we could do it for \$50,000 a year and it will take some administration. We pay \$1.3 million for the lights on the poles; if they are purchased, the city could save \$450,000 and it would pay for the them in about 3 years.

Mr. Hall discusses other energy management initiatives; the City made other lighting and HVAC improvements in other areas and he shows the slide. He has been involved in reading the fine print in contracts and he saved the City money by correcting their math or challenging their reasoning. They have done grants and revenue tracking. At one time CL & P owed the city \$19,000 in a rebate; they said the check was sent but had not been cashed, so they reissued the check. He has supported the energy issues and billing for the Finance Department that come up in the course of the week. The Clean Energy Task Force is working with residents and businesses for energy programs. An average resident could save \$250 by getting into this program. It is a selling point. Another program he worked hard on was CPACE. It is a great incentive to business owners. There are programs to finance short term. This program is to make big improvements and revamp energy structure and finance it over 20 years. There is an immediate cash benefit; cash flow improves immediately and they had to work this out with the Clean Energy Finance Authority and Tax Assessor's office and they are set up for CPACE in Middletown. Councilman Pessina asks if he has communicated this to the Chamber and downtown businesses. Mr. Hall replies he has not done it.

Mr. Hall continues and gives examples of energy management. Palmer Field has a lot of flood lights and Tina Gomes tipped me off on this. Because of the high demand to turn on those lights, we paid a large bill every month around \$3000 whether we used the lights or not because if you use it, you buy the rights to use it whether you turn it on or not. That is unjust because most of the lights are in the evening when the power is going down and they offered a new rate for outdoor field lighting and they had to figure out what they used and

dedicate a meter to the lights; in January and February of 2012, the City was billed \$6,329; the recent January and February, the City was billed \$74. It cost the City \$4,600 to do the electrical work, but they will save over \$30,000 per year. He lists some of the other cost savings they have done. There are revenue rebates or cost avoidance and they are costs in one year. The Honeywell service contract for \$127,000; he asked them to itemize it and it was negotiated to \$28,000 over a 15 year period. He runs through the rest of the energy management benefits. When the City put in the fuel cell in they were getting \$14,000 and now we will get \$72,000.

The Honeywell savings performance contract was problematic; some parts were too expensive and having delved into it, we have learned a lot and we are doing more things to save energy. Councilman Klattenberg adds the reason we felt strongly about having a relationship with Honeywell is because of the long history with the Board of Education; they had a strong opinion of the value. We should have been more diligent with the relationship. Councilman Pessina asks when their contract is up. Mr. Hall responds the construction phase is over and we have a service contract to service the controls they put in and some have contracts on mechanical equipment. Councilman Pessina asks when can we address some of the issues. Mr. Hall states we paid the money and getting them to give us something in return is difficult. They are giving some things back in service like at the Police headquarters. They are giving us additional hours and not billing us.

Mr. Hall states this is a rapidly changing field. He recommends that they continue energy management and that there are a lot of savings to realize. They should purchase and maintain the City street lights. He will inventory vehicle mileage and consumption; it is not a major thing, but it is a big amount. Councilman Pessina states any vehicles that will be purchased have to go before Finance and Government Operations for fuel efficiency. Mr. Hall states the vehicle should be appropriate to the use. The energy plan is to create a culture of conservation; they have not started it with employees and schools. We have not gotten the word out as to what it means. All of the quality of life issues, air quality, quality of the rivers; trees reduce the need for air conditioning and makes the town walkable. The Complete Streets Committee will be presenting a plan. For outreach it is the time to reach out to the City for energy efficiency and tree planting. We should promote energy savings plans for business and there is cutting-edge technology like micro grids and anaerobic digesters, more recycling and transportation issues.

He asks for comments. Councilman Pessina states great job. Councilman Faulkner asks about the window replacement at Remington Rand; what percentage has been done. Mr. Hall responds about 2/3's have been replaced and some remain to be replaced.

Noted for the Record Councilwoman Bartolotta leaves the meeting at 8:15 p. m.

Councilman Santangelo states the second floor needs replacement

Councilman Klattenberg introduces Larry Chatfield from the Clean Energy Task Force who has been there from the beginning and a proponent for energy savings and Councilwoman Salafia is one of our members.

Councilman Pessina thanks them for the presentation. He hopes he will follow up with the Chamber and downtown businesses. Mr. Hall states the Chamber does promote this but they are not aware of CPAGE.

Workshop Closes The Acting Chair, hearing no further comments, closes the workshop.

Meeting Adjourned

Councilman Klattenberg moves to adjourn the meeting and his motion is seconded by Councilman Faulkner. The vote is called and it is unanimous to approve with six aye votes. The Acting Chair declares the meeting adjourned at 8:17 p.m.

ATTEST:

MARIE O. NORWOOD
Common Council Clerk